

What is claimed is:

- 1 1. A user interface apparatus for use in one of a hybrid-fiber coaxial cable system and a
2 fiber-optic access system, the apparatus operable to adapt signals received at an
3 optical receiver for distribution within a user premises, the apparatus comprising:
4 a first adaptor circuit coupled to the optical receiver and operable to select at least
5 one channel transmitting signals modulated in a first format, and the first adaptor
6 circuit is connected to wiring within the user premises; and
7 a second adaptor circuit connected to the wiring within the user premises and
8 operable to receive signals transmitted on the at least one channel and convert the
9 signals to a format compatible with customer premises equipment.
- 1 2. The user interface apparatus of claim 1, wherein the first adaptor circuit includes a
2 band selector operable to select the at least one channel from a plurality of available
3 channels.
- 1 3. The user interface apparatus of claim 2, wherein the second adaptor circuit sends
2 signals to the first adaptor circuit indicating the at least one channel for transmitting
3 signals to the second adaptor circuit.
- 1 4. The user interface apparatus of claim 3, wherein the second adaptor circuit receives,
2 from a user input device, signals indicating the at least one channel for transmitting
3 signals to the second adaptor circuit.
- 1 5. The user interface of claim 1, wherein the first modulation format is a QPSK format
2 and the second adaptor circuit is operable to convert signals in QPSK modulation
3 format to a QAM modulation format.
- 1 6. The user interface of claim 1, wherein the signals received from the first adaptor
2 circuit include one or more of digital video signals, digital audio signals and data.

1 7. An adaptor apparatus coupled to a user premises and operable to receive media
2 signals transmitted over a distribution plant in a first format, the adaptor circuit
3 comprising:
4 first adaptor circuitry coupled to customer premises equipment and operable to
5 (1) receive signals indicative of a channel selection from a user input device,
6 (2) receive on a channel associated with the channel selection, the media signals in
7 the first format and (3) convert the signals to a second format compatible with the
8 customer premises equipment.

1 8. The adaptor apparatus of claim 7, further comprising:
2 second adaptor circuitry coupled to the first adaptor circuitry and operable to receive
3 signals indicative of a channel selection from the first adaptor circuitry and send the
4 media signals in the first format on the selected channel to the first adaptor circuitry.

1 9. The adaptor apparatus of claim 8, wherein the first format is a QPSK modulation
2 format and the second format is QAM modulation format.

1 10. The adaptor circuit of claim 7, wherein the distribution plant includes a passive
2 optical network and is operable to transmit digital information signals in QPSK
3 format to the user premises.

1 11. A method of converting signals received from a head-end over a distribution plant
2 including at least one fiber-optic link to a format compatible with customer premises
3 equipment comprising:
4 receiving the signals in a first format from the head-end in a downstream bandwidth;
5 selecting at least one channel in the downstream bandwidth carrying some of the
6 received signals;
7 transmitting the signals carried in the selected at least one channel on the selected at
8 least one channel to an adaptor circuit; and
9 converting the signals received on the selected at least one channel to the format
10 compatible with customer premises equipment at the adaptor circuit.

1 12. The method of claim 11, wherein the step of selecting at least one channel comprises
2 steps of:
3 receiving a signal indicative of a desired channel from a user input device; and
4 sending a signal to a band selector instructing the band selector to select one or more
5 channels that include the desired channel.

1 13. The method of claim 11, wherein the step of converting the signals comprises a step
2 of converting the signals from a QPSK modulation format to a QAM modulation
3 format.

1 14. A cable television system including a head-end transmitting media signals to a
2 plurality of users via a plurality of distribution plants comprising:
3 a hybrid-fiber coaxial distribution plant connected to the head-end;
4 fiber-optic access system connected to the head-end; wherein media signals
5 transmitted on the fiber-optic access system are transmitted at the same bit rate per
6 radio frequency channel as media signals transmitted on the hybrid-fiber coaxial
7 distribution plant.

1 15. The cable television system of claim 14, wherein the media signals transmitted on the
2 hybrid-fiber coaxial distribution plant are transmitted on radio frequency channels
3 spaced at approximately 6 MHz and transmitted at a data rate of approximately 5
4 Msymbol per sec; and the radio frequency channels include one of 256-QAM
5 channels and 64-QAM channels.

1 16. The cable television system of claim 15, wherein the media signals transmitted on the
2 fiber-optic access system are transmitted on 20 Msymbol per sec QPSK channels
3 spaced approximately between 20 and 24 MHz.

1 17. The cable television system of claim 15, wherein the fiber-optic access systems
2 include one of fiber-to-the-curb and fiber-to-the-home distribution plants.

1 18. The cable television system of claim 14, wherein the media signals transmitted on the
2 hybrid-fiber coaxial distribution plant are modulated using a format that requires less
3 spacing between radio frequency channels than the modulation format used for the
4 media signals transmitted on the fiber-optic access system.